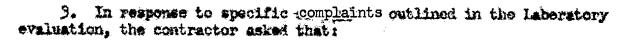
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a. several of the poor U.S. manufactured 5894/PX9903 tubes be sent to for further investigation.

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- b. we provide him with further details as to the failure to the field unit receiver of Paragraph 2.8.
- c. we provide him with a corrected instruction book described in Paragraph 2.9.
- d. we provide the frequencies desired for the new units.
- e. We advise how many leading coil forms we need for our present application.

4. The contractor also agreed that the antenna leading tuning would be adjusted for less optimistic ground conditions as cutlined in Faragraph 2.7 of the report. In reply to certain of our recommendations, the following comments were made:

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- took exception to Paragraph 4.1 which recommended that printed-through eyelets be used to improve the reliability of the printed circuitry. He doubted that we would obtain improved reliability using this technique. He did agree, however, that eyelet reliability should be improved and gave us the attacked report indicating work they have done in this direction.
- b. The Contractor agreed to give consideration to a means for providing a "heat sink" to permit bench testing of the field units as sutlined in Paragraph 4.1.2.
- c. The problem of improper switch detent action or alignment as outlined in Paragraph 4.2.1 is caused chiefly by the flexible chassis arrangement in the present unit. This problem is presently being investigated and some solution should be reached.
- 5. The following points of general interest were discussed:
 - They stated that they probably will provide some minimal test equipment, however, anything comprehensive will bequire additional funding.
 - b. From the point of prototype approval by the Laboratory, the contractor stated that timing would not permit evaluation

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of the initial units in Washington. The contractor would appreciate our sending an engineer to his plant, however, to help in shaking down the original unit.

- c. The contractor's proposal does not include spare parts for the units ordered. We requested that he provide us with a parts perculiar list, so that we may order the necessary spares.
- d. The contractor further agreed to investigate the permanent recording of the recognition signal on the tape.

| L ARLand Alba 7 who made a managed and alba 25 which sould be an a second state of the | |
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| 6. After the Laboratory report of the field unit had been thoroughly discussed and the general scope of the contractor's proposal had been | |
| reviewed, we transfered our attention to Communi- | 50 V 1 |
| cations System. Considerable discussion on the development of an amblique | - JUA I |
| to the equipment to permit utilization of the | 50X1 |
| followed. From the discussion of this system, it would appear that the | 50X1 |
| most expeditious handling of traffic could be accomplished if the | 50X1 |
| were placed in the signal centers at each end of the | 50X1 |
| system. This has the disadvantages of complicating olightly | 50X1 |
| the present system, as well as requiring approximately six or seven | 50X1 |
| racks in the signal center. (See attached eketches A and B for the block | |
| diagram of this arrangement.) Such a system, however, has the great advantage | 13 |
| of allowing a message from signal center to | 50X1 |
| signal center without additional handling and of permitting communications | |
| along the entire route at the maximum transmission rate of 1600 words per | |
| minute. It is believed that standard telephone lines would be satisfactory | |
| between the signal centers and the transmitting and receiving stations. | |
| Program quality lines, however, would provide an improvement. | |
| 7. asked how long it would take to put the present | 50X1 |
| unit into good sperating condition, incorporating most of the | 50X1 |
| recommended changes resulting from the field tests. said | EZUXI |
| that the unit could be cleaned up in approximately three months, provided | 00/(|
| the unit is received at an early date. Points of redesign already | 50X1 |
| recognized are the excitor tuner (feedback problems need analysis), the | |
| IF gain tracking, the oscillator, and the tape transport machanism. | 50X1 |
| In response to question as to whether could go into | 50X1 |
| production on the equipment, replied that mountainal units on | 50X1 |
| a model shop basis could be produced in from mine to twelve months from | |
| receipt of the contract. Simultaneous refurbishment of the existing unit | |
| plus the model shop production of two one-way units could probably be | |
| accomplished in approximately seven menths. | |
| | 50X1 |
| 8. indicated that has an internal research project | 0 0111 |
| on the analysis of multipath over various ranges. He suggested that if we | 50)(4 |
| had any intention of making further tests that they would be very | 50X1 |
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| | multipath info | nitoring our tra reation. nature we would r the transmissi | nsmissions so was advi- | sed that if we | gain additional planned any table to permit | 50X1 |
| | | · | | | · . | 50X1 |
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| | with our request during our recalled et about 1500 to submit | ent visit <u>a verbal</u> |
| proposal for the redes field unit. | ign and clean-up of the present | |
| 2. For specific | redesign of the coder, redesign | of the power |
| supply, end partial reclean-up of the remain | design of the receiver, plus the | general |
| for the fi | rst two units; the balance in qui | entities |
| | ted out that this work will const | |
| | ACK OGO OTTER MITTE ANTE COURT | erence. |
| practically all of the | redesign for the coder and power | supply, |
| originally considered of the receiver redesign | under proposal, and about og required, so that from this po | one-half |
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| originally considered of the receiver redesign | under proposal, and about og required, so that from this po | one-half |
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| originally considered of the receiver redesigned development should be a second or sec | gn required, so that from this policy be about 1/3 to 1/2 completed. | one-half |
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